Condair ABS3

Adiabatic Atomiser Humidifier

INSTALLATION AND OPERATING INSTRUCTIONS

2546634 EN 1112

condair

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1 Introduction

1.1 To the very beginning

We thank you for having purchased the **adiabatic atomiser humidifier Condair ABS3**.

The Condair ABS3 incorporates the latest technical advances and meets all recognized safety standards. Nevertheless, improper use of the adiabatic air humidifier Condair ABS3 may result in danger to the user or third parties and/or impairment of material assets.

To ensure a safe, proper, and economical operation of the Condair ABS3, please observe and comply with all information and safety instructions contained in the present installation and operating instructions as well as in the separate documentations of the components installed in the humidification system.

If you have questions, which are not or insufficiently answered in this documentation, please contact your Condair supplier. They will be glad to assist you.

1.2 Notes on the installation and operating instructions

Limitation

The subject of these installation and operating instructions is the adiabatic atomiser humidifier Condair ABS3. The various accessories are only described insofar as this is necessary for proper operation of the equipment. Further information on accessories can be obtained in the respective instructions.

These installation and operating instructions are restricted to the **installation, commissioning, operation, servicing,** and **trouble-shooting** of the Condair ABS3 and is meant for **well trained personnel being sufficiently qualified for their respective work**.

The installation and operating instructions are supplemented by various separate items of documentation. Where necessary, appropriate cross-references are made to these publications in the installation and operating instructions.

Symbols used in this manual

CAUTION!

The catchword “CAUTION” designates notes in this installation and operating instructions that, if neglected, may cause **damage and/or malfunction of the unit or other material assets**.

⚠ WARNING!

The catchword “WARNING” used in conjunction with the general caution symbol designates safety and danger notes in this installation and operating instructions that, if neglected, may cause to **injury to persons**.

⚠ DANGER!

The catchword “DANGER” used in conjunction with the general caution symbol designates safety and danger notes in this installation and operating instructions that, if neglected, may lead to **severe injury or even death of persons**.

Safekeeping

Please safeguard these installation and operating instructions in a safe place, where they can be immediately accessed. If the equipment changes hands, the documentation must be passed on to the new operator.

If the documentation gets mislaid, please contact your Condair supplier.

Language versions

These installation and operating instructions are available in various languages. Please contact your Condair supplier for information.

Copyright protection

The present installation and operating instructions is protected under the Copyright Act. Passing-on and reproduction of the manual (or part thereof) as well as exploitation and communication of the contents are prohibited without written permission by the manufacturer. Violation of copyright terms is subject to legal prosecution and arises liability for indemnification.

The manufacturer reserves the right to fully exploit commercial patent rights.

2 For your safety

General

Every person working with the Condair ABS3 must have read and understood the installation and operating instructions before carrying out any work.
Knowing and understanding the contents of the installation and operating instructions is a basic requirement for protecting the personnel against any kind of danger, to prevent faulty operation, and to operate the unit safely and correctly.

All ideograms, signs and markings applied to the unit must be observed and kept in readable state.

Qualification of personnel

All work (installation, operating, servicing , etc.) described in these installation and operating instructions **may only be carried out by specialist who are well trained and adequately qualified and are authorized by the customer**.
For safety and warranty reasons any action beyond the scope of this manual must be carried out only by qualified personnel authorised by the manufacturer.

It is assumed that all persons working with the Condair ABS3 are familiar and comply with the appropriate regulations on work safety and the prevention of accidents.

Intended use

The adiabatic atomiser humidifier Condair ABS3 are intended exclusively for air humidification within the specified operating conditions (see chapter 9 “Product specifications”. Any other type of application, without the written consent of your Condair supplier, is considered as not conforming with the intended purpose and may lead to the Condair ABS3 becoming dangerous.
Operation of the equipment in the intended manner requires **that all the information in these instructions are observed (in particular the safety instructions)**.

Danger that may arise from the unit

⚠ DANGER! Danger of electric hazzard

One may get in touch with live parts when the wiring box is open. Touching live parts may cause severe injury or danger to life.

Prevention: before carrying out any work set the Condair ABS3 out of operation as described in chapter 5.4 (switch off the unit, disconnect it from the mains and stop the water supply) and secure the unit against inadvertent power-up.

⚠ WARNING!

Badly maintained humidifiers can endanger the health. If the unit is insufficient maintained ill-making germs may grow in the water reservoir of the Condair ABS3 and may can affect the air passing through the humidifier.

Prevention: the Condair ABS3 must be cleaned in the prescribed intervals according to the information given in chapter 6 “Maintenance". The cleaning works must be carried out correctly and the air filter must be replaced after their prescribed lifetime has elapsed.

Behaviour in case of danger

If it is suspected that **safe operation is no longer possible**, then the Condair ABS3 should immediately **be shut down and secured against accidental power-up** according to chapter 5.4. This can be the case under the following circumstances:

- if the Condair ABS3 is damaged
- if the Condair ABS3 is no longer operating correctly
- if connections and/or piping are not sealed
- if electrical cables are defective
- if the Condair ABS3 is no longer fastened correctly.

All persons working with the Condair ABS3 must report any alterations to the unit that may affect safety to the owner without delay.

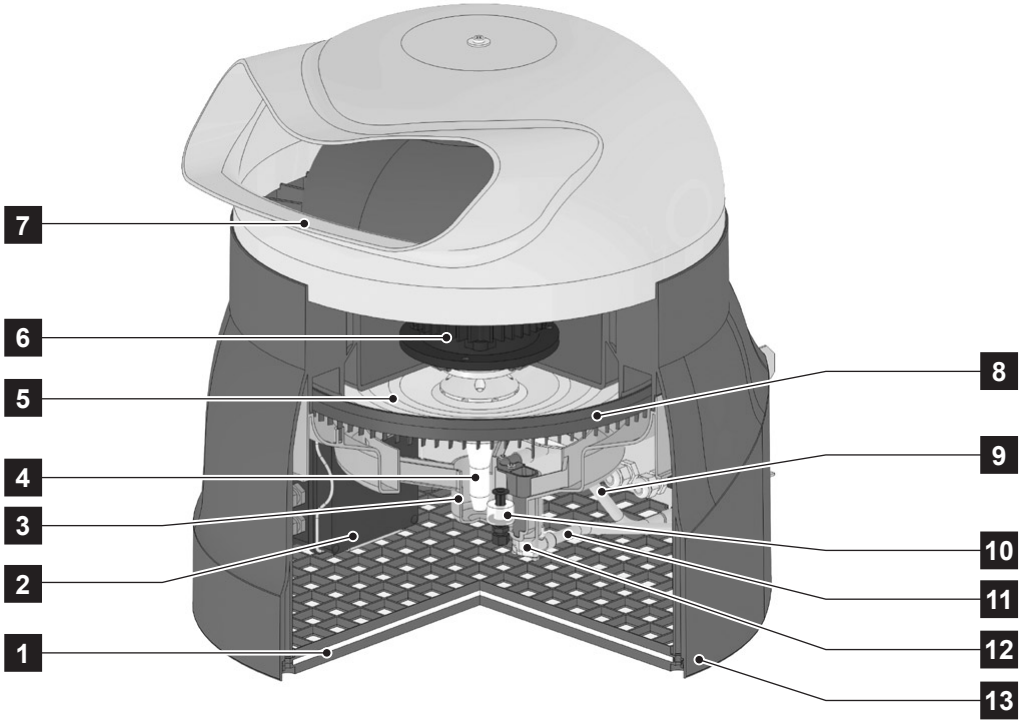
Prohibited modifications to the unit

No modifications must be undertaken on the Condair ABS3 without the express written consent of the manufacturer.

For the replacement of defective components use exclusively **original accessories and spare parts** available from your Condair supplier.

3 Product overview

3.1 Unit construction



1	Air filter (EU3/C3)	8	Atomiser collar
2	Electrical connection box	9	Water supply
3	Water reservoir	10	Level switch
4	Cone with fan	11	Water drain
5	Atomiser disk	12	Siphon
6	Motor	13	Unit housing
7	Discharge hood, rotatable		

3.2 Principle of operation

The Condair ABS3 operates according to the **atomization principle**.

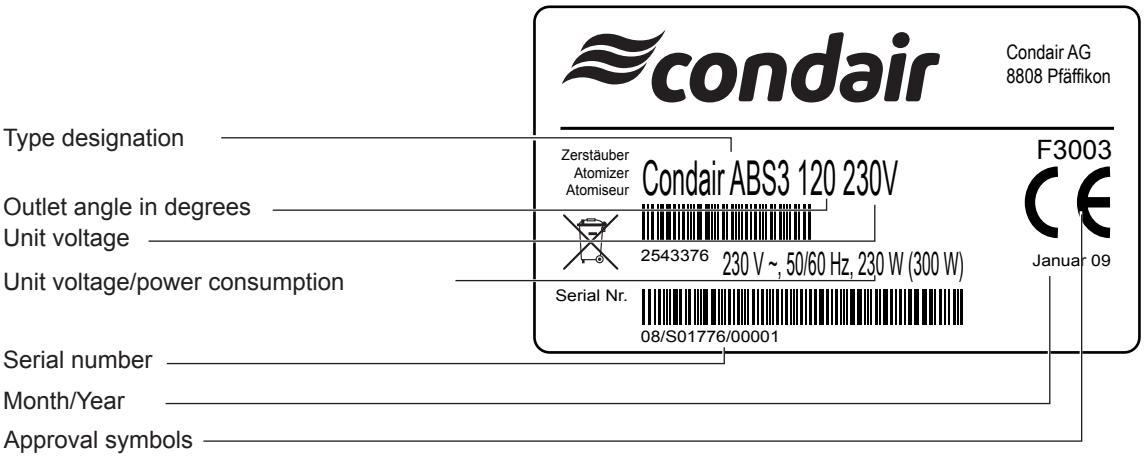
The water is drawn in through cone (4) from the water reservoir (3) and is hurled from the atomiser disk (5) against the atomiser collar (8), thereby producing aerosols (fog). The level in the water reservoir is monitored and controlled with the float switch (10).

The fan attached to the cone draws in room air through the air filter (1) on the bottom of the base unit. This air transports the aerosols to the atomiser outlet (7) and distributes them in the room.

The humidifier is controlled via an external On/Off humidistat or an external 0-10V continuous humidity controller which opens and closes the inlet valve. When controlled via the external continuous humidity controller the inlet valve is opened and closed cyclically, depending on the control signal.

3.3 Identification of the unit

The indication of the unit as well as the most important unit data are found on the type plate:



3.4 Accessories and options

Accessories

Designation	Code	Description
Filter valve	Z261	Filter valve with G 1/2" internal thread connectors for the installation in the water supply line.
Room humidistat	HSC	On/Off room humidistat
Room humidistat	H5 / H5V	On/Off room humidistat (Note: this humidistat can be used as a **maximum humidistat**).
Room humidity controller	RCC	0-10 V continuous humidity controller with sensor

Options

Designation	Code	Description
Anti-freeze kit	AFP	Anti-freeze kit for the operation of the Condair ABS3 up to a temperature of -2 °C. The anti-freeze kit consist of a heating element connected to the control board. The Condair ABS3 is prepared for the installation of the anti-freeze kit. The control of the heating element is established via the temperature sensor built into the unit. The temperature sensor switches the heating element on if the ambient temperature drops below 1°C.

3.5 Standard delivery

The standard delivery includes:

– Adiabatic atomiser humidifier ABS3 with options according delivery note.
– Ordered accessories with operating instructions, packed separately
– Installation and operating instructions (this document).
– Fixing set for the wall mounting of the unit (1 pc. wall bracket, 4 screws with dowels ø8 mm, 1 pc. safety screw M6x20 with washer ø6x12)
– Fixing set for the hanging installation (3 pcs. angle brackets)
– Water supply pipe (L: 1.5 m, with G 3/4" union nuts)
– Adapter G 1/2" - G 3/4"
– Water drain pipe (L: 1.5 m, internal diameter: 10 mm)
– 2 pcs. cable straps
– Spare parts list

3.6 Storing/Transportation/Packaging

Storing

Store the unit in the original packaging in a protected area meeting the following requirements:

– Room temperature: 1 ... 40 °C
– Room humidity: 10 ... 75 %rh

Transportation

For optimum protection always transport the unit in the original packaging.

If possible, always transport the unit with the help of another person.

Packaging

Keep the original packaging of the Condair ABS3 for later use.

In case you wish to dispose of the packaging, observe the local regulations on waste disposal. Never dispose of the packaging to the environment.

4 Mounting and installation work

4.1 Important notes for mounting and installation work

Qualification of personnel

All mounting and installation work must be carried out only by **well qualified personnel**, which is familiar with the Condair ABS3.

All work concerning the electric installation must be performed only by adequately qualified personnel (electrician or workman with equivalent training).

Safety

The Condair ABS3 may be connected to electric mains only after all installation work has been completed.

The local regulations relating job safety must be followed and complied with for all installation and mounting work.

General notes

All statements relating to the positioning and installation of the ABS3 as well as to the water and electrical installation must be followed and complied with.

Observe and comply with all local regulations dealing with water and electrical installations.

When installing individual components use **the fixing materials supplied with the unit**. If fixing with the materials supplied is not possible in your particular case, select a method of fixing that is of similar stability. In case of doubt, please contact your Condair supplier.

The connection of the water supply pipe and the water drain pipe on the unit (see chapter 4.3) as well as the connection of the main cable and the cable of the external humidistat/humidity controller in the unit (see chapter 4.4) can be done before the unit is mounted to the wall/ceiling.

4.2 Mounting the unit

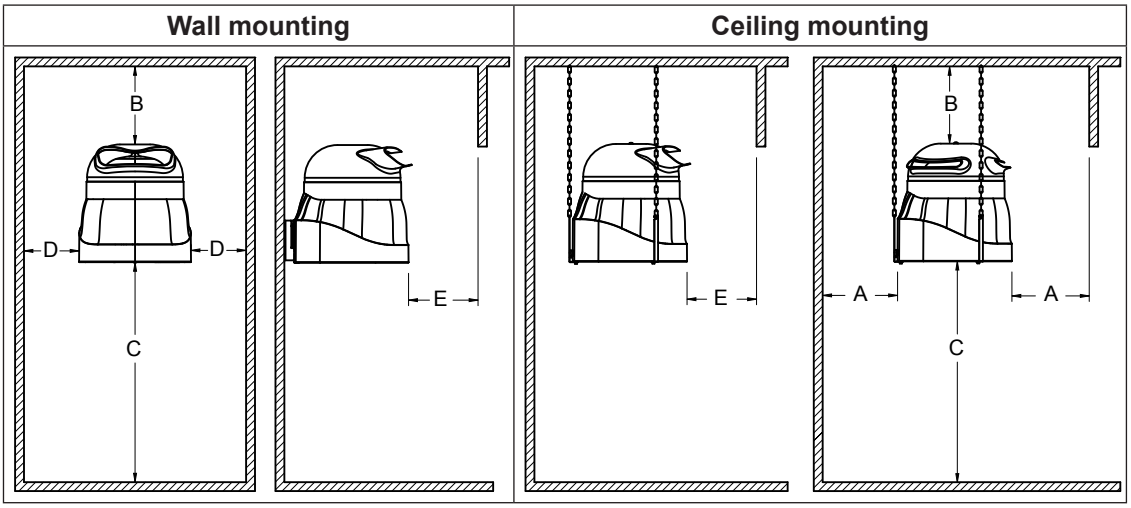
4.2.1 Notes on unit location

In order to ensure the correct function of the humidifier and the accessibility for maintenance, please observe the following locating instructions:

– The Condair ABS3 humidifiers are designed for **wall mouting** or **ceiling mounting** (hanging installation). Make sure that the structure (wall, pillar, ceiling, etc.) on which the unit is to be mounted has sufficient carrying capacity and can accommodate the fastening elements.

– In order to ensure the correct function, the Condair ABS3 must be installed exactly horizontal (with the air filter facing downward against the floor).

– Locate the unit such that the aerosol stream can spread freely. The obstruction of the aerosol stream by objects such as tubular racks, machines, supports, etc., will result in stagnation and the formation of turbulence which could cause condensation. Since the discharge hood of the humidifier can be turned horizontally, the aerosol stream can be directed to bypass any obstructions.
In the following table you find the **minimum distances** (appoximate values), which must be maintained when positioning the Condair ABS3. The dimensions relate to a room temperature of 20 °C and a relative humidity of 45 %. At lower temperatures and/or higher relative humidity larger minimum distances must be maintained



	A	B	C	D	E
Minimum distance in m	≥ 3.0	≥ 1.0	≥ 1.5	≥ 1.0	≥ 5.0

– Mount the unit such that there is **sufficient room for maintenance**. Also make sure that the unit is readily accessible and that there is no accident risk during maintenance.

– If units are to be installed facing each other, make sure that they are **at least 10 m apart**.

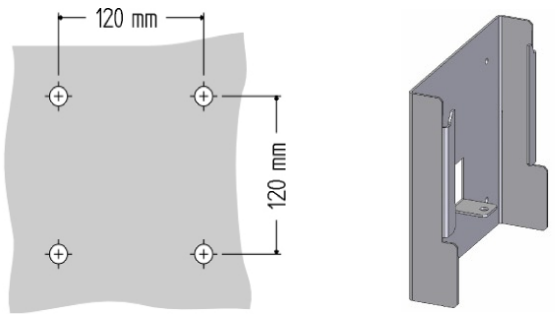
– Insulate cold water piping in the vicinity of the aerosol stream (risk of condensation).

– The evaporation process extracts heat from the ambient air. Make sure, therefore, that the aerosol stream is not directed at persons.

4.2.2 Wall mounting

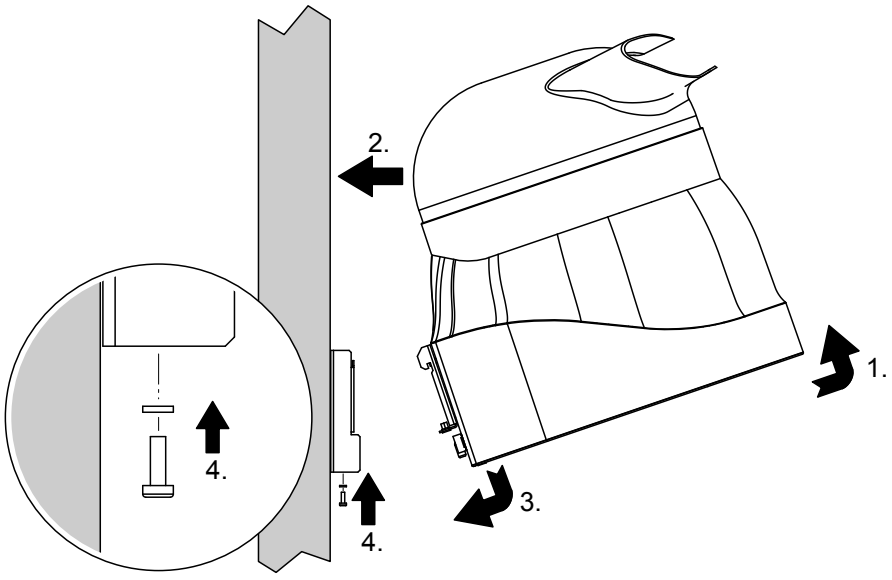
To fix the humidifier to the wall, use the wall bracket, screws and dowels provided. The wall bracket can be used as template for the fixing holes.

Mounting the wall bracket



1. Mark the fixing holes on the wall using the wall bracket as template. Make sure the wall bracket is aligned exactly horizontal before marking the holes.
2. Drill the four fixing holes (ø8 mm, 45mm deep).
3. Clean the holes and insert the dowels.
4. Fix the wall bracket with four screws to the wall (position of the bracket as shown in the figure above). Before tightening the screws align the wall bracket exactly horizontal.

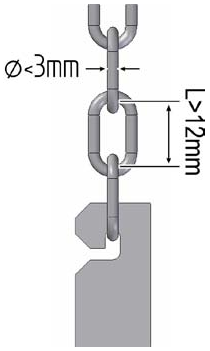
Mounting the unit



1. Lift the unit above the wall bracket and swivel it slightly towards the wall.
2. Move the unit towards the wall into the wall bracket.
3. Swivel the unit to the horizontal position until both brackets are perfectly coupled.
4. Secure the unit in the wall bracket with the safety screw M6x20 and the washer ø6x12 supplied (**mandatory**).

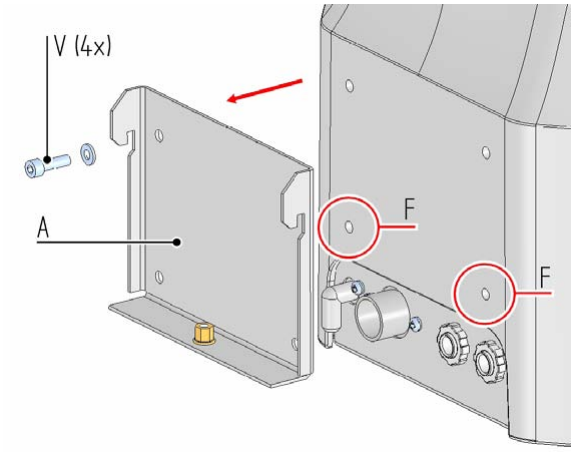
4.2.3 Ceiling mounting (hanging installation)

Ceiling mounting is done with the angle brackets supplied as standard.



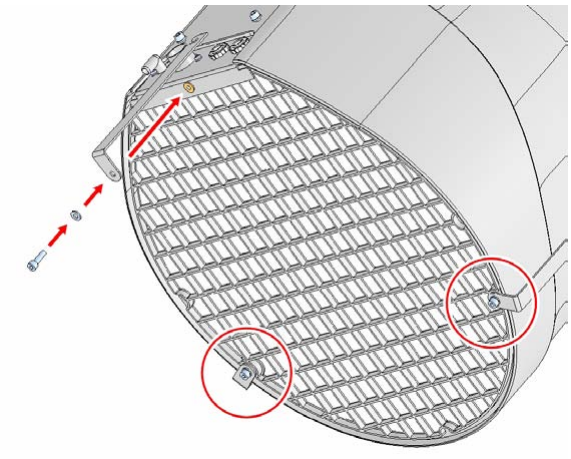
The three chains for hanging up the unit must be provided by the customer. The chains must be fixed at the ceiling exactly perpendicularly above the three angle brackets fixed to the unit. The fixing points and the chains must have a sufficient load-bearing capacity, in order to carry the weight of the unit (see chapter 9.1 “Technical data”).

Use chains made of steel (preferably corrosion-resistant steel). The dimension of the chain links must meet to the specifications in the adjacent figure.



1. Undo the 4 screws “V”, and remove the mounting plate “A” on the backside of the unit.
   Note: Store the mounting plate “A” for a possible later use.

   Now, you have 5 screws with washers (4 from the just removed mounting plate and the safety screw provided). Refit two of the screws and washers into the fixing holes “F”.

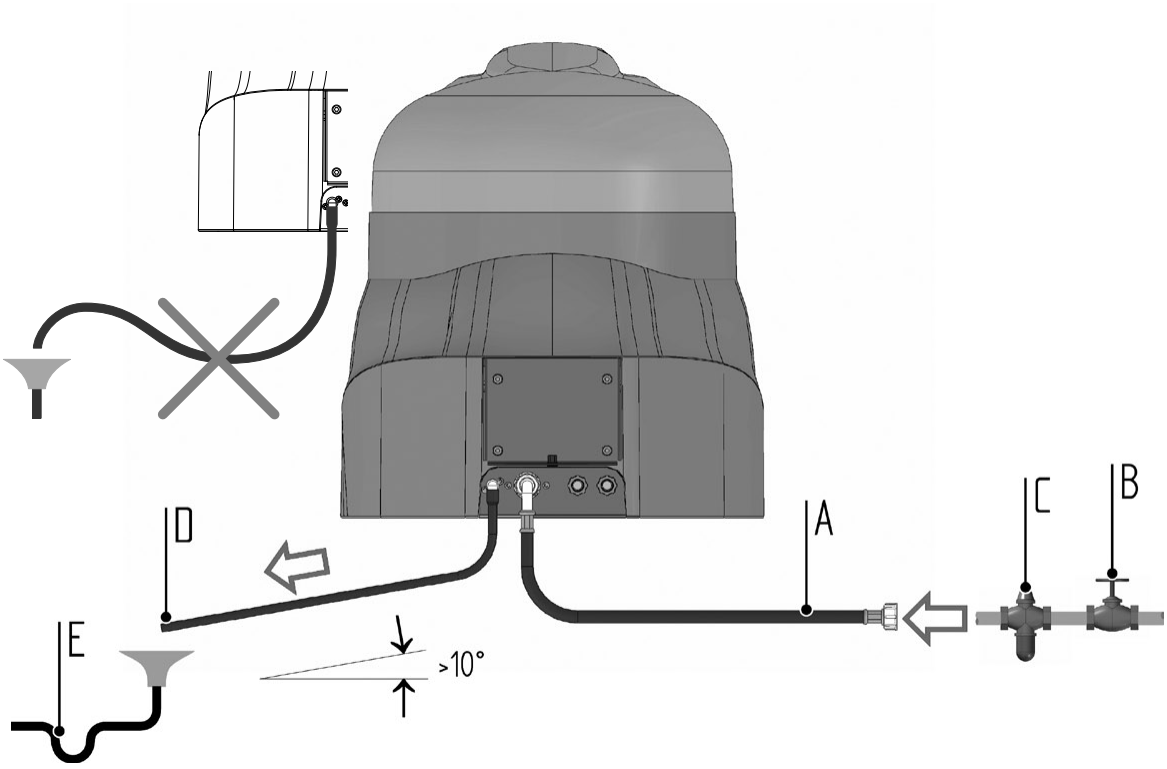


2. Fix the three angle brackets (for hanging installation) with the screws and washers to the unit, as shown in the adjacent figure.

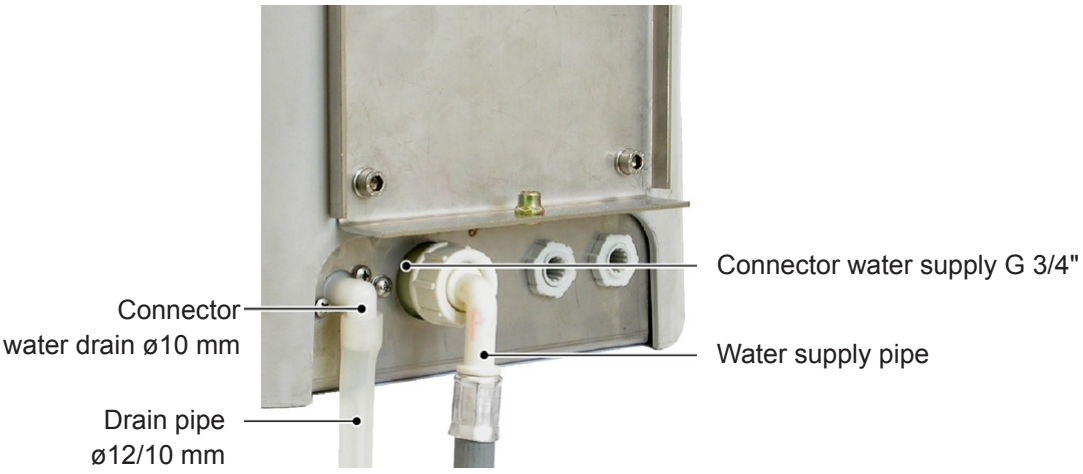
3. Hook the unit with the angle brackets into the chains and check again that the device hangs exactly horizontal.

4.3 Water installation

4.3.1 Overview water installation



A Water supply pipe (included in the delivery, L: 1.5 m, G 3/4")
B Stop valve (by client)
C Water filter (accessory Z261, installation recommended, by client)
D Drain pipe (included in the delivery, L: 1.5 m) with constant downward slope >10°
E Open drain funnel with siphon (by client)



4.3.2 Notes on water installation

Water supply

The water supply is to be carried out according to the figure found in chapter 4.3.1 and the applicable local regulations for water installations. The indicated connection specifications must be observed.

- The installation of a **stop valve** (mandatory) and a **water filter** (accessory “Z261”, installation recommended) should be made as close as possible to the unit.
- **Notes on water quality**:
  - For the water supply of the Condair ABS3, use exclusively **untreated drinking water** or **fully demineralised water.**
  - The use of **additives** such as corrosion inhibitors, disinfectants, etc. is **not allowed**, since these additives may endanger health and affect proper operation.
- The connection material must be **pressure-proof** and **certified for use in drinking water systems**.
- **Important!** Before connecting the water line, **the line should be well flushed out**.

CAUTION!

The thread at the humidifier connection is made of plastic. To avoid overtightening, the union nut of the water pipe must be tightened by hand only..

Water drain

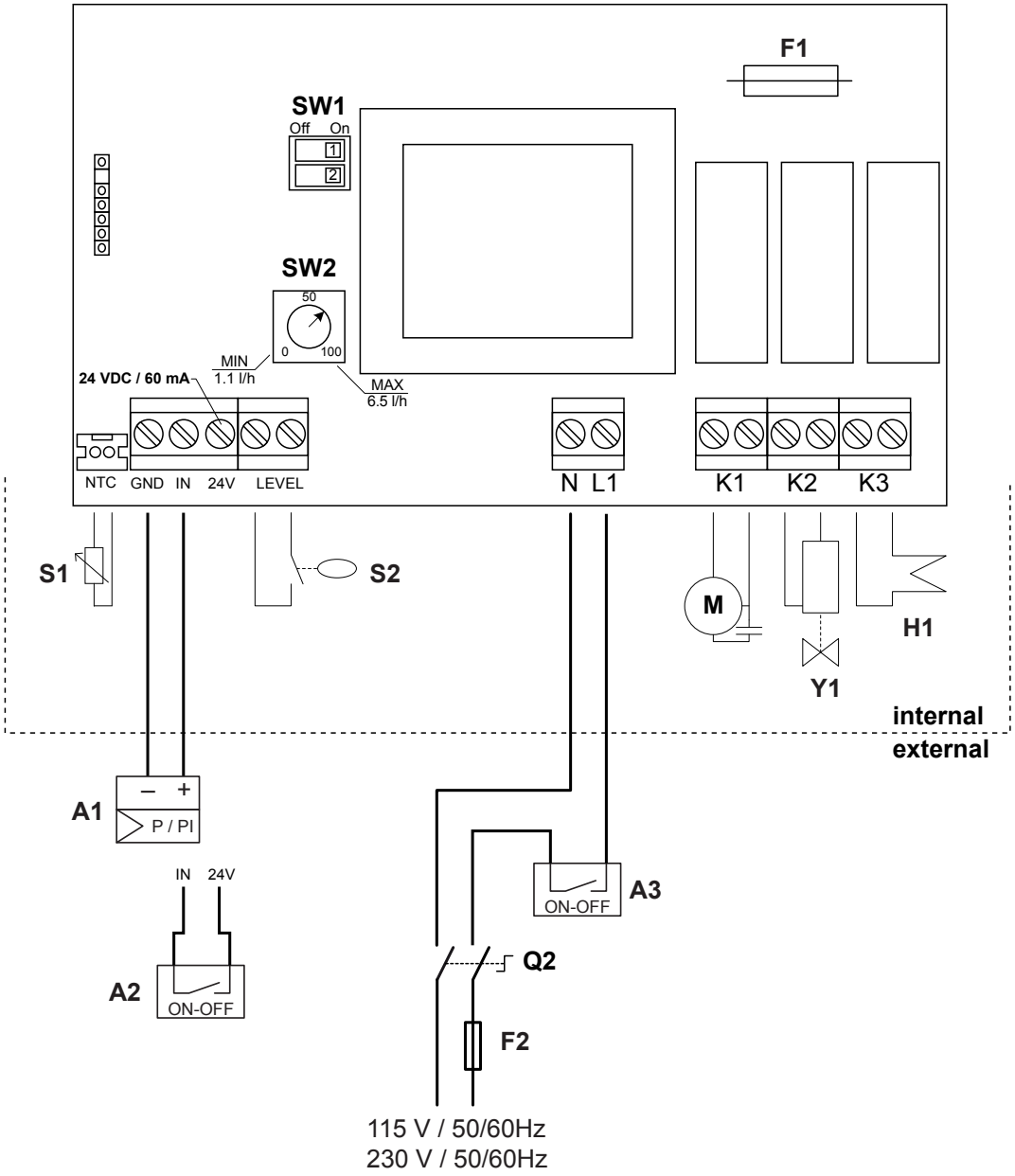
The water drain is to be carried out according to the figure found in chapter 4.3.1 and the applicable local regulations for water installations. The indicated connection specifications must be observed.

- Make sure that the drain line is routed with a constant downward slope >10° to the drain funnel of the building.
  Important: The drain pipe **must be prevented from sagging**; support with brackets, if necessary.
- Make sure that the minimum inside diameter of 10 mm is maintained throughout the entire length of the drain pipe and that the pipe is not kinked.
- Make sure that the drain pipe is correctly fixed and easily accessible for inspections and cleaning purposes.

When operating the Condair ABS3 with fully demineralised water:
Fully demineralised water is aggressive! For this reason, use exclusively installation material made of corrosion-resistant steel (min. DIN 1.4301) or plastic.

4.4 Electric installation

4.4.1 Wiring diagram **Condair ABS3**



A1 Continuous humidity controller 0...10 V
A2 On/Off humidistat
A3 Maximum humidistat (not mandatory, required contact load: 230V/2A or 115V/4A)
S1 Temperature sensor (to switch the optional heating H1 on and off)
S2 Level switch
H1 Heating (option anti-freeze kit)
F1 Internal fuse transformer (315 mA, slow acting)
F2 External fuse voltage supply (2.5 A, slow acting)
M Fan motor
Q2 External service switch (with a minimum contact clearance of 3 mm)
SW1 DIP switches for setting the flushing cycles
SW2 Rotary switch for setting the power limit
Y1 Inlet valve

4.4.2 Notes on electric installation

The electric installation must be carried out according to the wiring diagram in chapter 4.4.1 and the applicable local regulations. All information given in the wiring diagram must be followed and observed.

The electrical installation of the Condair ABS3 includes:

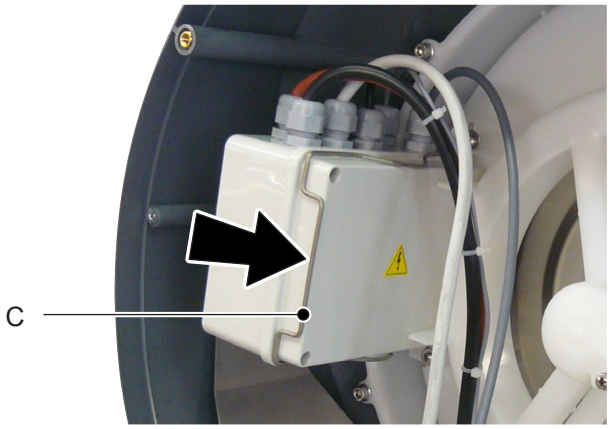
Installation
Power supply 230V/50-60Hz or 115V/50-60Hz Connection of power supply to terminals L1 and N according to the wiring diagram. The service switch Q2 (disconnects all 2 wires with a minimum contact clearance of 3 mm) and the fuses F2 (2.5 A, slow acting) are mandatory. Cable section according to the applicable local regulations. **CAUTION!** Before connecting the power supply cable make sure the local mains voltage meet the value stated on the rating plate of the Condair ABS3.
External humidity controller (A1) or external On/Off humidistat (A2) Connect the external humidity controller 0...10V to terminals IN (+) and GND (–) or connect the external On/Off humidistat to terminals IN and 24V. Note: In locations with electromagnetic interferences use shielded connecting cables.
Maximum humidistat (A3), not mandatory Connect the switching contact of the maximum humidistat to supply line L1 according to the wiring diagram. Required contact load: **230V/2A** or **115V/4A**

Note: In order to connect the mains cable and the cable of the external humidistat/humidity controller to the control board, the electric connection box in the unit must be dismounted and opened. For this purpose please observe the notes in chapter 4.4.3 and the notes regarding the cabling in chapter 4.4.4.

4.4.3 Dismounting and mounting the electric connection box

Dismounting the electric connection box

1. Undo the three screws at the air filter assembly and remove the air filter assembly.



2. Push fixing clip “C” sidewards and carefully pull connection box out of the unit.
3. Undo the four screws of the connection box and remove the cover.

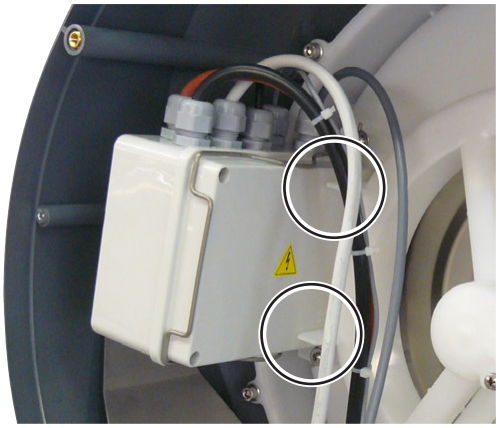
Now you can connect the cables on the control board or configure the control.

CAUTION!

The **electronic components** inside the electric connection box are **very sensitive to electrostatic discharge**. When the unit is open for installation work, appropriate measures must be taken to **protect these components against damage caused by electrostatic discharge (ESD protection)**.

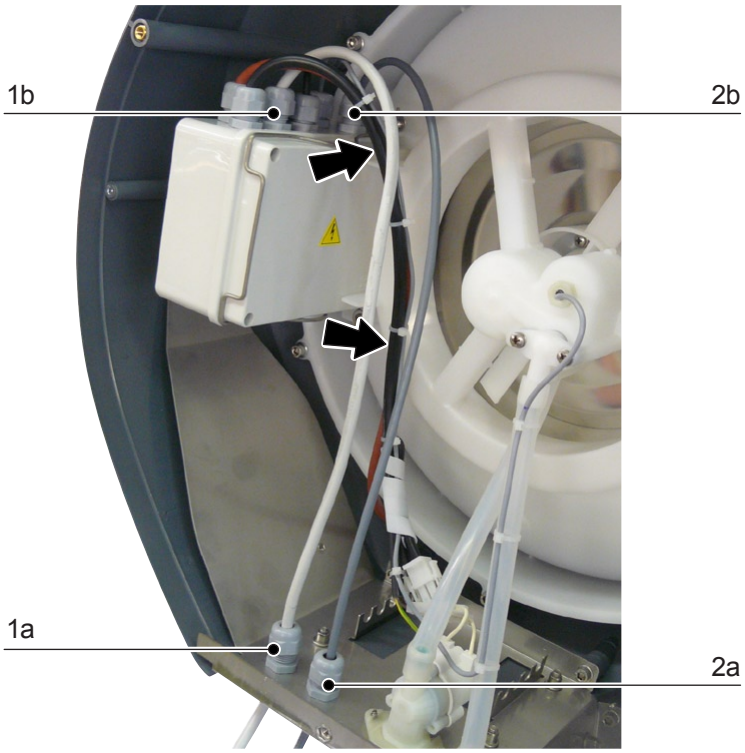
Mounting the electric connection box

1. Re-attach the cover of the connection box and fix it with the four screws.



2. Replace the connection box into the receptacle in the unit and fix it with the fixing clip.
3. Set the air filter assembly (grid-filter-grid) into the bottom of the unit an fix it with the three screws.

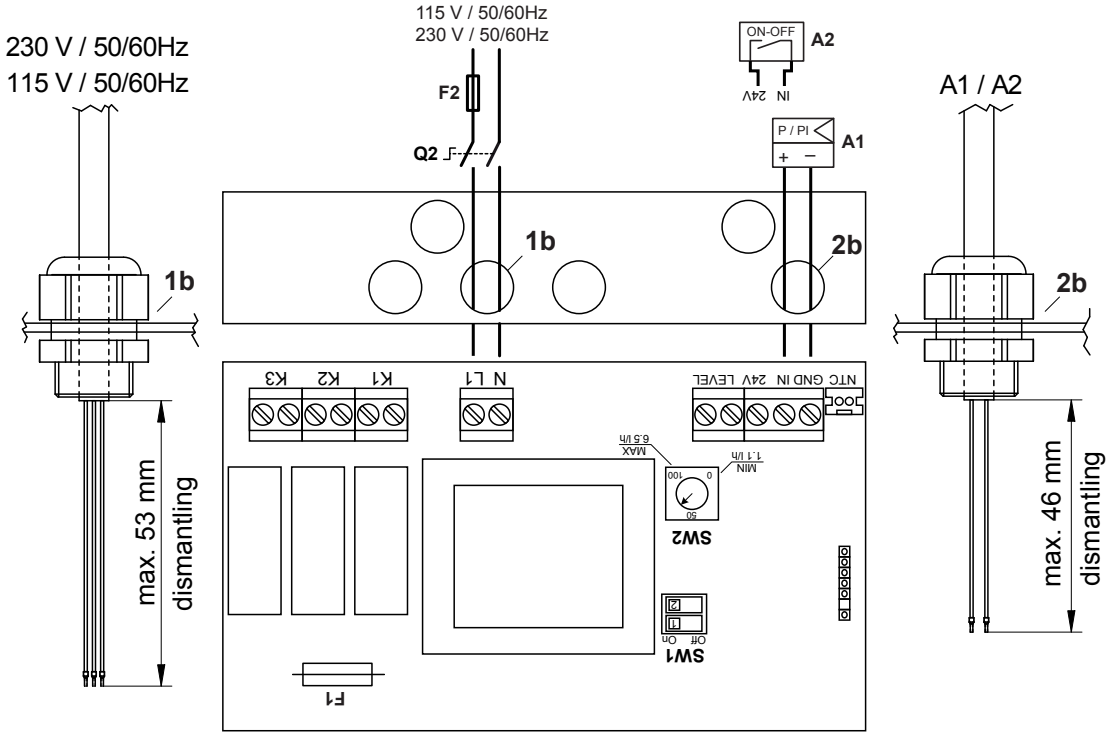
4.4.4 Notes regarding the cabling



Pass the power supply cable through the cable gland “1a” into the unit and through the cable gland “1b” into the electric connection box and connect it to the control board according to the wiring diagram.

Pass the cable of the external controller/humidistat through the cable gland “2a” into the unit and through the cable gland “2b” into the electric connection box and connect it to the control board according to the wiring diagram.

Fix both cables with the cable straps provided to the existing cables at the places marked with arrows. Finally, tighten the four cable glands.

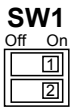


4.4.5 Configuration

For the configuration the electric connection box in the unit must be dismounted and opened. For this purpose please observe the notes in chapter 4.4.3.

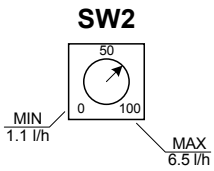
4.4.5.1 Setting the flushing cycles

The flushing cycles are set via the DIP switches SW1 on the control board:



SW1	On	Off
1	During operation a flushing cycle is performed every 6 hours.	The 6 hours flushing cycle during operation is deactivated (e.g. for the operation with fully demineralised water).
2	After 72 hours without humidity demand a flushing cycle is performed before the next humidification cycle.	72 hours flushing deactivated.

4.4.5.2 Setting the humidification capacity limitation



The humidification capacity limitation is set via the rotary switch SW2 on the control board.

Setting range: 0 (1.1 l/h) ... 100 (6.5 l/h)
Factory setting: 100 (6.5 l/h).

5 Operation

5.1 Setting the unit into operation

Proceed as follows when putting the Condair ABS3 into operation:

1. Check the Condair ABS3 and the installations for possible damage.

   ⚠ DANGER!

   A damaged unit or an unit with damaged installation may present danger to human life or cause severe damage to material assets.
   A damaged unit and/or an unit with damaged or faulty installation must not be operated.

2. Make sure that the electric connection box is closed, correctly set in the receptacle of the unit and secured and that the air filter assembly is correctly mounted and fastened.
3. Open the stop valve of the water supply line and check water system for leakages.

   CAUTION!

   An unit with leakages must not be operated.

4. If necessary, turn outlet openings of the diffusor into the desired blow-out direction.
5. Verify the set humidity value at the external humidity controller/humidistat, and readjust as required.
6. Turn on the service switch in the mains supply line.

   The unit performs a flushing cycle, which takes approx. 1 minute. Then, the unit is ready for operation. As soon as the external humidity controller or the humidistat requires humidity the motor starts and the atomisation begins.

5.2 Inspections during operation

During operation the Condair ABS3 and the humidification system have to be inspected weekly. On this occasion check the following:

- the water installation for any leakage.
- the humidifier and the other system components for correct fixing and any damage.
- the electric installation for any damage.

If the inspection reveals any irregularities (e.g. leakage, irregular running) or any damaged components take the Condair ABS3 out of operation as described in chapter 5.3. Then, let the damage or malfunction be resolved by a qualified specialist or a service technician of your Condair supplier.

Note: During operation individual drops are carried along by the air flow and thrown against the hood. This causes an audible noise, which is completely normal.

5.3 Taking the unit out of operation

Proceed a follows to put the Condair ABS3 out of operation (e.g. for maintenance work, elimination of a malfunction):

1. If the Condair ABS3 humidifies right now: Set the humidity reference value on the external humidity controller/humidistat to 0 %rh and wait until the unit has finished the flushing cycle (approx. 1 minute).
2. Turn off the service switch in the mains supply line, then secure the service switch against inadvertent switching on.
3. Close the stop valve of the water supply line.

Note: If the Condair ABS3 is not used for prolonged period of time, cover the unit with a plastic hood.

6 Maintenance

6.1 Important notes on maintenance

Qualification of personnel

All maintenance work must be carried out only by **well qualified and trained personnel authorised by the owner**. It is the owner's responsibility to verify proper qualification of the personnel.

General note

The instructions and details for maintenance work must be followed and upheld.

Only the maintenance work described in this documentation may be carried out.

Only use original Condair spare parts to replace faulty parts.

Safety

⚠ DANGER!

Before maintenance is initiated, **the Condair ABS3 must be taken out of operation** in accordance with instructions in chapter 5.3 and protected against unintentional switching on.

⚠ WARNING!

If the Condair ABS3 is insufficiently maintained ill-making germs can increase in the water reservoir by the time and get into the ambient air.

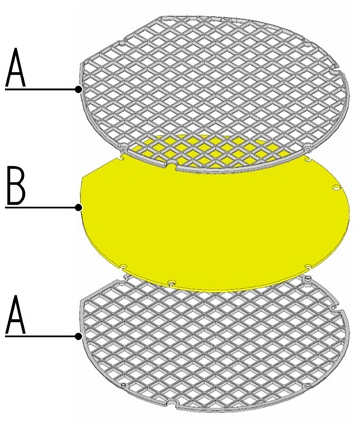
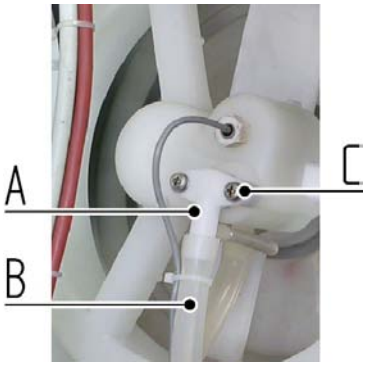
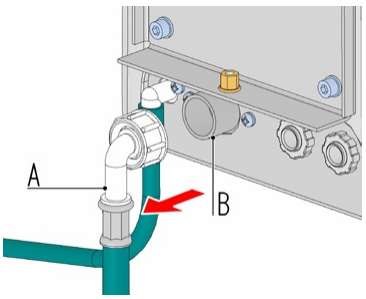
6.2 Maintenance intervals

In order to maintain operational safety the Condair ABS3 must be maintained in regular intervals. **The time interval for the maintenance is to be adapted to the operating conditions**. The hygiene status depends mainly on the quality of the humidifier water and the micro-biological and chemical composition of the supply air. Therefore the maintenance intervals must be determined for each system separately.

The **first visual check must be carried out after 200 operating hours**. Depending on the encountered hygiene status during this first check the maintenance interval time must be decreased or increased.

In any case the Condair ABS3 is to be maintained however at least twice annually.

6.3 Maintenance work

Component	Work to be carried out
Air filter 	1. Undo the three screws and remove the air filter assembly downwards. 2. Clean filter mat on both sides with a vacuum cleaner. 3. Place the cleaned filter mat between the two filter grids, then insert the filter assembly from downside into the unit and fix it with the three screws. Note: If the filter mat is heavily contaminated, replace the filter mat (EU3/C3).
Drain siphon 	1. Undo the three screws and remove the air filter assembly downwards. 2. Remove pipe “B” from the connector. 3. Undo the two screws “C”, then remove the connection piece “A” from the siphon. 4. Clean siphon and connection piece. 5. Assemble the unit in reverse order of steps 1… 4.
Sieve in the inlet valve 	1. Remove supply pipe “A”. 2. Pull the sieve out of the inlet valve. 3. Clean the sieve. 3. Insert the sieve into the inlet valve. 5. Re-connect supply pipe “A” and tighten union nut by hand. Note: If the sieve must be cleaned often, a water filter should be installed in the water supply line (see chapter 4.3.1).

7 Troubleshooting

7.1 Important notes on troubleshooting

Qualification of personnel

Have faults eliminated by adequately qualified and trained personnel only. Malfunctions caused by the electrical installation must be repaired by authorized personnel (e.g. electrician) only.

Repair work and the replacement of defective parts may only be carried out by your Condair representative's service technician.

Safety

In order to eliminate faults, the Condair ABS3 must be **set out of operation as described in chapter 5.3, disconnect the unit from the mains and secure the unit against inadvertent power-up**.

7.2 Malfunction list

Important! Most operational malfunctions are not caused by faulty equipment but rather by improper installation. Therefore, a complete fault diagnosis always involves a thorough examination of the entire system.

Malfunction	Cause	Remedy
The atomiser does not run, although the service switch in the mains supply line is switched on.	The current humidity in the room is higher than the set reference humidity value.	None, wait.
	Fuse F2 in the mains supply line defective.	Check/replace fuse F2.
The atomiser keeps running and cannot be switched off by reducing the reference humidity value.	Air humidity very low (<45 %rh)	None, wait.
	External humidity controller/ humidistat defective.	Check/replace external humidity controller/humidistat
The set reference humidity value is not reached. The atomiser runs continuously.	Air filters heavily contaminated.	Clean air filter.
	Room too large.	Contact Condair dealer.
	Suction tube of atomiser unit blocked.	Check suction cone. Clean if necessary.
The atomiser runs noisily.	Atomiser assembly not correctly installed.	Check atomiser assembly. Mount parts correctly.
	Suction cone has become undone.	Tighten the suction cone.

8 Taking out of service/Disposal

8.1 Taking out of service

If the Condair ABS3 must be replaced or if the humidification system is not needed any more, proceed as follows:

1. Take the unit out of operation as described in chapter 5.3.
2. Have the unit (and all other system components, if necessary) unmounted by a qualified service technician.

8.2 Disposal/Recycling

In conformance with the European Directive 2002/96 EC on Waste Electrical and Electronic Equipment (WEEE) this device may not be disposed of in domestic waste. This also applies to countries outside the EU, per their specific requirements.

Please dispose of this product in accordance with local regulations at the collecting point specified for electrical and electronic equipment.

If you have any questions, please contact the responsible authority or the distributor from which you purchased this device.

Should this unit be passed on to other parties (for private or professional use), the content of this regulation must also be related.

Thank you for your contribution to environmental protection.

9 Product specifications

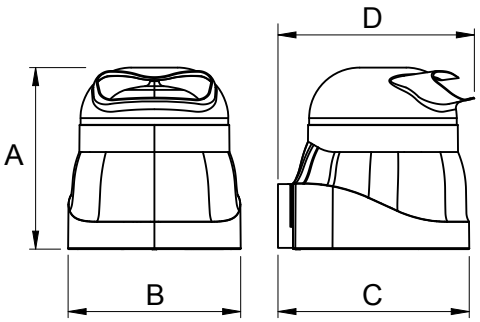
9.1 Technical data

Humidification capacity	1.1 ... 6.5 l/h
Unit voltage	230V / 50/60Hz or 115V / 50/60Hz
Power consumption	0.23 kW (0.3 kW with optional anti-freeze kit)
Air circulation	280 m^3/h (77.8 l/s)
Content water reservoir	0.055 l
Unit weight	17.6 kg
Connector water supply	R 3/4" outside thread
Connector water drain	ø 10 mm
Admissible pressure water supply	1...10 bar (0.1...1.0 MPa)
Admissible temperature water supply	5...45 °C
Water quality	Tap water or fully demineralised water
Admissible operation temperature/humidity	+2 ... +35 °C / 0 ... <100 %rh **
Admissible operation temperature/humidity (with optional anti-freeze kit)	–2 ... +35 °C / 0 ... <100 %rh **
Admissible storage temperature/humidity	–10 ... +60 °C / 0 ... 80 %rh
Type of protection	IPX4
Conformity	CE mark

** non-condensing

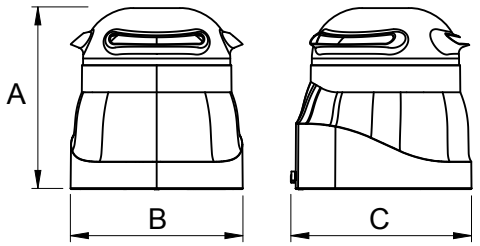
9.2 Dimensions

120° version



	A	B	C	D
Dimensions in mm	565	505	530	610

360° version



	A	B	C
Dimensions in mm	565	505	530

EC

Konformitätserklärung	Declaration of conformity	Déclaration de conformité
Wir, Condair AG CH-8808 Pfäffikon SZ erklären in alleiniger Verantwortung, dass das Produkt	We, Condair Ltd. CH-8808 Pfäffikon SZ declare under our sole responsibility, that the product	Nous, Condair SA CH-8808 Pfäffikon SZ déclarons sous notre seule responsabilité, que le produit
	Condair ABS3	
auf das sich diese Erklärung bezieht, mit den folgenden Normen oder normativen Dokumenten übereinstimmt	to which this declaration relates is in conformity with the following standards or other normative standards	auquel se réfère cette déclaration est conforme aux normes ou autres documents normatifs
	EN 61000-6-2 **EN 61000-6-3** **EN 60335-1** **EN 60335-2-98**	
und den Bestimmungen der folgenden Richtlinien entspricht	and is corresponding to the following provisions of directives	et est conforme aux dispositions des directives suivantes
	2006 / 95 / EC **2004 / 108 / EC**	

Pfäffikon, January 01, 2012

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Notes

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